PATENT ABSTRACTS OF JAPAN

(11)Publication number : **01-094255**

(43)Date of publication of application : **12.04.1989**

(51)Int.Cl. **G01N 27/12**
// G01N 27/06

(21)Application number : **62-251311**

(22)Date of filing : **05.10.1987**

(71)Applicant : **NISSIN ELECTRIC CO LTD**

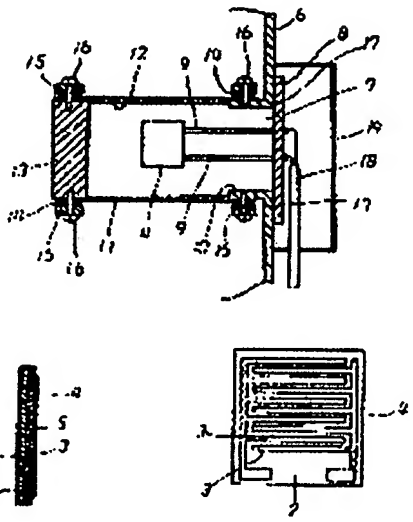
(72)Inventor : **MUKAI SADAYOSHI**
KANBA MASARU

(54) GAS-IN-OIL SENSOR

(57)Abstract:

PURPOSE: To accurately measure the hydrogen gas in oil, by coating the surface of a sensor main body with a membrane composed of a polyimide resin and further covering the sensor main body with a gas permeable film.

CONSTITUTION: The surface of a sensor main body 4 is coated with a membrane 5 composed of a polyimide resin and further covered with a gas permeable film 11. The oil in a tank 6 is certainly blocked by the film 11 and does not reach the circumference of the sensor main body 4. Since the transmission coefficient of the film is large to hydrogen gas, said gas certainly transmits through the film 11. Since the transmission coefficient of the polyimide membrane 5 is large to the hydrogen gas as compared with other gas, the hydrogen gas in the gas transmitting through the film 11 selectively transmits through the polyimide membrane 5 to be brought into contact with the membrane 2 composed of metal oxide to be reacted therewith. By this mechanism, the surface resistance of the membrane 2 changes corresponding to the concn. of hydrogen gas. Therefore, by detecting said surface resistance as the resistance between the electrodes 3, the concn. of the hydrogen gas can be measured.



LEGAL STATUS

[Date of request for examination]

[Date of sending the examiner's decision of rejection]

[Kind of final disposal of application other than the examiner's decision of rejection or application converted registration]

[Date of final disposal for application]

[Patent number]

[Date of registration]

[Number of appeal against examiner's decision of rejection]

[Date of requesting appeal against examiner's decision of rejection]

[Date of extinction of right]

DERWENT-ACC-NO: 1988-269858

DERWENT-WEEK: 198838

TITLE: Thermal sensor e.g. for gas flow measurement - uses multiple-spoked wire lattice across circular flow path, for inertialess response

INVENTOR: FALKO, M M; LOZINSKII, G Y A ; MAZAKHOV, V V

PATENT-ASSIGNEE: LOZINSKII G YA[LOZII]

PRIORITY-DATA: 1980SU-2920269 (May 5, 1980)

PATENT-FAMILY:

PUB-NO	PUB-DATE	LANGUAGE	PAGES	MAIN-IPC
SU 1379632 A	March 7, 1988	N/A	003	N/A

APPLICATION-DATA:

PUB-NO	APPL-DESCRIPTOR	APPL-NO	APPL-DATE
SU 1379632A	N/A	1980SU-2920269	May 5, 1980

INT-CL (IPC): G01F001/68

ABSTRACTED-PUB-NO: SU 1379632A

BASIC-ABSTRACT:

Gas passes through the bore of dielectric ring (1) studded with rounded peripheral teeth (2) serving as anchorages for diametral loops of a continuous electrical filament (3), one set on each side of ring (1).

USE/ADVANTAGE - Appts. may be used for measuring flow-rate of cool gases in automatic control systems. The aim is to give fast response. The two continuous **wires woven** across the ring serve as thermal **sensors of the gas** flow irrespective of the distribution across the flow path: hence resistive response of the wire nets formed is uniform and without appreciable thermal inertia. Bul.9/7.3.88.

CHOSEN-DRAWING: Dwg.1/3

TITLE-TERMS: THERMAL SENSE GAS FLOW MEASURE MULTIPLE SPOKE WIRE LATTICE
CIRCULAR FLOW PATH INERTIA RESPOND